



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Arjun G. Yodh, et al.

Confirmation No.: 7528

**Application No.: 10/526,941** 

Group Art Unit: Not Yet Assigned

Filing Date: September 8, 2005

**Examiner: Not Yet Assigned** 

CARBON NANOTUBES: HIGH SOLIDS DISPERSIONS AND NEMATIC **GELS THEREOF** 

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Dear Sir:

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Pursuant to 37 CFR § 1.56 and in accordance with 37 CFR §§ 1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 CFR § 1.56(b).

冈 In accordance with § 1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified application, within three months of the date of entry into the national stage of

## **DOCKET NO.: UPNA-0034/P2952**

**PATENT** 

- 2. -

	the above identified application as set forth in § 1.491, before the mailing date
	of a first Office Action on the merits of the above-identified application, or
	before the mailing date of a first Office Action after the filing of request for
	continued examination under § 1.114, no additional fee is required.
	In accordance with § 1.97(c), this Information Disclosure Statement is being
	filed after the period set forth in § 1.97(b) above but before the mailing date of
	either a Final Action under § 1.116 or a Notice of Allowance under § 1.311, or
	before an action that otherwise closes prosecution in the application, therefore:
	Certification in Accordance with § 1.97(e) is attached; or
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$\boxtimes$	Copies of reference numbers $1 - 120$ and $133 - 135$ listed on the attached
	Form PTO-1449 are enclosed herewith.
$\boxtimes$	Copies of reference numbers 121 - 132 on the attached Form PTO 1449 are
	not required to be submitted pursuant to 37 CFR § 1.98(a)(2)(i).
	Copies of references are not being submitted because they were
	previously cited by or submitted to the U.S. Patent and Trademark
	Office in patent application number , filed for which a
	claim for priority under 35 U.S.C. § 120 has been made in the instant
	application.

DOC	KET NO.: UPNA-0034/P2952 - 3 -	1	PATENT		
	The relevance of those listed references which are not in the English language is as follows:				
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Sheet 1 of 13

		-1449 Modified	Docket No. UPNA-0034/ P2952	Application No. 10/526,941		
C	ited b	t and Publications by Applicant heets if necessary)	Applicant Arjun G. Yodh, et al.			
		nent of Commerce rademark Office	Filing Date September 8, 2005	Group Not Yet Assigned		
			Confirmation No. 7528			
O'	ГНЕ	R DOCUMENTS (Includ	ing Author, Title, Date	, Pertinent Pages, Etc.)		
	1	Adams, M., et al., "Entropically driven microphase transitions in mixtures of colloidal rods and spheres," <i>Nature</i> , <b>1998</b> , <i>393</i> , 349-352				
	2	Andrews, R., et al., "Nanotube composite carbon fibers," Appl. Phys. Lett., 1999, 75(9), 1329-1331				
	3	Antonov, R.D., et al., "Subband population in a single-wall carbon nanotube diode," <i>Phys. Rev. Lett.</i> , <b>1999</b> , <i>83(16)</i> , 3274-3276				
	4	Appenzeller, J., et al., "Field-modulated carrier transport in carbon nanotube transistors," <i>Phys. Rev. Lett.</i> , <b>2002</b> , <i>89(12)</i> , 126801-1 – 126801-4				
	5					
	6			of single-walled carbon nanotubes Chem. Soc., 2003, 125, 11186-11187		
	7		ution of small diameter s	single-wall carbon nanotubes in		
	8	Bandow, S., et al., "Purification of single-wall carbon nanotubes by microfiltration,"  J. Phys. Chem. B, 1997, 101, 8839-8842				
	9	solutions," Nano Letts., 2	<b>2002</b> , <i>2(1)</i> , 25-28	vidual carbon nanotubes in aqueous		
	10					
EXAMINER		DATE CONSIDERED				

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List of Paten Cited b (Use several s U.S. Departm	-1449 Modified  t and Publications by Applicant sheets if necessary)  ment of Commerce Crademark Office	Docket No. UPNA-0034/ P2952  Applicant Arjun G. Yodh, et al.  Filing Date	Application No. 10/526,941  Group	
		September 8, 2005 Confirmation No. 7528	Not Yet Assigned	
ОТНЕ	R DOCUMENTS (Includ	ling Author, Title, Dat	te, Pertinent Pages, Etc.)	
11	Bethune, D.S., et al., "Cobalt-catalysed growth of carbon nanotubes with single-atomic-layer walls," <i>Nature</i> , <b>1993</b> , <i>363</i> , 605-607			
12		Biró, L.P., "Room temperature growth of single-wall coiled carbon nanotubes and Y-branches," <i>Mat. Sci. and Eng. C</i> , <b>2002</b> , <i>C 19</i> , 3-7		
13	Bower, C., et al., "Deformation of carbon nanotubes in nanotube-polymer composites," <i>Appl. Phys. Lett.</i> , <b>1999</b> , <i>74</i> (22), 3317-3319			
14				
15	Bronikowski, M.J., et al., "Gas-phase production of carbon single-walled nanotubes from carbon monoxide via the HiPco process: A parametric study," J. Vac. Sci. Tech., 2001, A19, 1800-1805			
16		rocesses refined for cor	nmercial apps," EE Times, 2004, e.jhtml, 3 pages	
17	nanotubes for protein im	mobilization," J. Am. C	onalization of single-walled carbon Chem. Soc., 2001, 123, 3838-3839	
18	<b>1998</b> , <i>282</i> , 95-98		alled carbon nanotubes," Science,	
. 19	substrate," Surface Scien	ace, <b>2000</b> , 462, 195-202		
20				
EXAMINER				

	Form PTO-1449 Modified			). 34/	Application No. 10/526,941
List of Patent and Publications Cited by Applicant (Use several sheets if necessary)			Applicant Arjun G.	Yodh, et al.	
		nent of Commerce Frademark Office	Filing Dat September		Group Not Yet Assigned
			Confirmat 7528	ion No.	
O'.	THE	R DOCUMENTS (Inclu	ding Author	, Title, Date,	Pertinent Pages, Etc.)
	21	Czerw, R., et al., "Orga nanoscale assembly," A	•	•	carbon nanotubes: a route to -427
	22	de Heer, W.A., et al., "Aligned carbon nanotube films: production and optical and electronic properties," <i>Science</i> , <b>1995</b> , <i>268</i> , 845-847			lms: production and optical and
	23	Dekker, C., "Carbon na 52, 2228	motubes as m	olecular quant	tum wires," Physics Today, 1999,
	24		n nanotube-p	olyaniline hyb	rid materials," Eur. Poly. J., 2002,
	25	Denkov, N.D., et al., "T	Two-dimension	onal crystalliza	ntion," Nature, 1993, 361, page 26
	26 Dillon, A.C., et al., "Storage of hydrogen in single-walled carbon nanotubes,"  Nature, 1997, 386, 377-379				
	27	J. Am. Chem. Soc., 200	<b>2</b> , 124(12), 3	169-3174	trophoresis of carbon nanotubes,"
	28	Dresselhaus, M.S., Scie Press, San Diego, 1990			on Nanotubes, 1st Ed., Acad.
	29	Duesberg, G.S., et al., "chromatography," Cher	'Separation on. Commun.,	f carbon nanot 1998, 435-436	5
	30				
EXAMINER DATE CONSIDERED				SIDERED	

	Form PTO-1449 Modified  List of Patent and Publications  Cited by Applicant			o. 34/	Application No. 10/526,941
Ci				Yodh, et al.	
		nent of Commerce Trademark Office	Filing Dat September		Group Not Yet Assigned
			Confirmat 7528	ion No.	
ОТ	HEF	R DOCUMENTS (Includ	ling Author	r, Title, Date, 1	Pertinent Pages, Etc.)
	31	Fan, S., et al., "Self-oriented regular arrays of carbon nanotubes and their field emission properties," <i>Science</i> , <b>1999</b> , <i>283</i> , 512-514			
	32	Fraden, S., et al., "Angular correlations and the isotropic-namatic phase transition in suspensions of tobacco mosaic virus," Phys. Rev. E, 1993, 48(4), 2816-2837			
	33	Freitag, M., et al., "Controlled creation of a carbon nanotube diode by a scanned gate," Appl. Phys. Lett., 2001, 79(20), 3326-3328			
	34	Freitag, M., et al., "Role of single defects in electronic trans nanotube field-effect transistors," <i>Phys. Rev. Letts.</i> , <b>2002</b> , 89 216801-1 – 216801-4			
	35	Gast, A.P., et al., "Simple ordering in complex fluids; Colloidal particles suspended in solution provide intriguing models for studying phase transitions," <i>Physics Today</i> , <b>1998</b> , 24-30			
	36	Girifalco, L.A., et al., "C graphitic potential," <i>Physical Physical</i> 10 of the control of the c	s. Rev. B, <b>2</b> 0	0 <b>00</b> , <i>62(19)</i> , 13	
	37	Grunlan, J.C., et al., "Wa with an exceptionally low	ater-based s w percolation	ingle-walled-na on threshold," A	anotube-filled polymer composite 1dv. Mater., 2004, 16(2), 150-153
	38	Hadjiev, V.G., et al., "Raman scattering test of single-wall carbon nanotube composites," <i>Appl. Phys. Lett.</i> , <b>2001</b> , <i>78(21)</i> , 3193-3195			
	39	microscopy tips," J. Am.	Chem. Soc.	, <b>1999</b> , <i>121</i> , 97	
	40				
EXAMINER				DATE CONS	SIDERED

Form	РТО	-1449 Modified	Docket No UPNA-00 P2952		Application No. 10/526,941
C	List of Patent and Publications Cited by Applicant (Use several sheets if necessary)		Applicant	Applicant Arjun G. Yodh, et al.	
		nent of Commerce Frademark Office	Filing Dat September		Group Not Yet Assigned
			Confirmat 7528	ion No.	
O'	THE	R DOCUMENTS (Inclu	ding Author	, Title, Date,	Pertinent Pages, Etc.)
	41	Halpin, J.C., et al., "Th 16(5), 344-352	e Halpin-Tsa	i equations: a i	review," Polymer Eng. Sci., 1976,
	42	Hamada, et al., "New o Rev. Lett., 1992, 68(10)		nal conductors	graphitic microtubules," Phys.
	43	Hamon, MA., et al., "Inanotubes," Chemical I		•	sis of soluble single-walled carbon
	44	Heinze, S., et al., "Electory performance," Appl. Ph			otube transistors for improved 8-5040
	45		tionalization	of carbon nand	otubes with polystyrene,"
	46		A new purific	ation method t	for single-wall carbon nanotubes
	47	Hone, J., et al., "Electri	cal and thern	nal transport pr	roperties of magnetically aligned <i>et.</i> , <b>2000</b> , <i>77(5)</i> , 666-668
	48	Huang, W., et al., "Pref	ferential solul	oilization of sn	naller single-walled carbon," Langmuir, 2003, 19, 7084-7088
	49				n," Nature, 1991, 354, 56-58
	50	50 Iijima, S., et al., "Single-shell carbon nanotubes of 1-nm diameter," <i>Nature</i> , <b>1993</b> , 363, 603-604			
EXAMINER				DATE CON	SIDERED

	Form PTO-1449 Modified  List of Patent and Publications  Cited by Applicant			). 34/	Application No. 10/526,941
Ci				Yodh, et al.	
	U.S. Department of Commerce Patent and Trademark Office			e r 8, 2005	Group Not Yet Assigned
			Confirmat 7528	ion No.	
ОТ	HE	R DOCUMENTS (Includ	ding Author	, Title, Date,	Pertinent Pages, Etc.)
	51	Islam, M.F., et al., "High weight fraction surfactant solubilization of single-wall carbon nanotubes in water, Nano Letts., <b>2003</b> , <i>3(2)</i> , 269-273  Islam, M.F., et al., "Direct measurement of the polarized optical absorption cross section of single-wall carbon nanotubes," <i>Phys. Rev. Lett.</i> , <b>2004</b> , <i>93</i> (3), 037404-1 – 037404-4			
	53 54	nanotubes," Phys. Rev. I	B, <b>2005</b> , 71,	20140-1 – 201	ignment of single wall carbon 401-4 123-QED, 2004, 4 pages
	Javey, A., et al., "Ten- to 50 nm-long quasi-ballistic carbon nanotube devices obtained without complex lithography," <i>Proc. Natl. Acad. Sci. USA</i> , <b>2004</b> , <i>101(37)</i> , 13408-13410				
	56	nanotubes," Chem. Phys	. Lett., 2002	, <i>352</i> , 328-333	
	57	stretching," Appl. Phys.	Lett., 1998,	<i>73(9)</i> , 1197-11	
	58	Phys. Rev. Lett., 2001, 8	6(11), 2416	-2419	single-walled carbon nanotubes,"
	59	situ atom transfer radica	l polymeriza	tion," J. Am. (	nultiwalled carbon nanotubes by in Chem. Soc., 2004, 126, 412-413
	60 Kong, J., et al., "Nanotube molecular wires as chemical sensors," <i>Science</i> , 2000, 287, 622-625				
EXAMINER DATE CONSIDERED				SIDERED	

	Form PTO-1449 Modified  List of Patent and Publications Cited by Applicant (Use several sheets if necessary)			o. 34/	Application No. 10/526,941
C				Yodh, et al.	
		nent of Commerce Trademark Office	Filing Dat September		Group Not Yet Assigned
			Confirmat 7528	ion No.	
O	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)				
	61	Krupke, R., et al., "Sepa nanotubes," Science, 200			niconducting single-walled carbon
	62	Lau, K., et al., "The revolutionary creation of new advanced materials – carbon nanotube composites," <i>Composites</i> , <b>2002</b> , <i>Part B(33)</i> , 263-277			
	63		le route to la	rge-scale orde	red arrays of liquid-deposited
	64	Li, F., et al., "Tensile str from their macroscopic			oon nanotubes directly measured <b>000</b> , <i>77(20)</i> , 3161-3163
	65		rization of f	unctionalized s	single-walled carbon nanotubes at
	66		ic carbon na	nocomposites	from carbon nanotubes
	67		ed deposition of individual single-walled carbon nanotubes or ed templates," <i>Chem. Phys. Lett.</i> , <b>1999</b> , 303, 125-129		
	68	Liu, J., et al., "Fullerene			
	69 Liu, JF., et al., "Self-asse the graphite/liquid interface			nuir, 2000, 16,	
	70				
EXAMINER DATE CONSIDERED				SIDERED	

	Form PTO-1449 Modified  List of Patent and Publications			o. 34/	Application No. 10/526,941
C	List of Patent and Publications Cited by Applicant (Use several sheets if necessary)			Yodh, et al.	
		ent of Commerce rademark Office	Filing Dat September		Group Not Yet Assigned
			Confirmat 7528	ion No.	
O	THER	DOCUMENTS (Include	ding Author	, Title, Date, l	Pertinent Pages, Etc.)
	71	Mann, D., et al., "Ballistic transport in metallic nanotubes with reliable Pd Ohmic contacts," <i>Nano Lett.</i> , <b>2003</b> , <i>3(11)</i> , 1541-1544			
	72	Manne, S., et al., "Direct visualization of surfactant hemimicelles by force microscopy of the electrical double layer," <i>Langmuir</i> , <b>1994</b> , <i>10</i> , 4409-4413			
	73	Matsuo, E.S., et al., "Origin of structural inhomogeneities in polymer gels,"  Macromolecules, 1994, 27, 6791-6796			
	74	McEuen, P.L., "Single-wall carbon nanotubes," <i>Phys. World</i> , <b>2000</b> , <i>13</i> , 1 page (Abstract)			
	75	Mintmire, J.W., et al., "Are fullerene tubules metallic?," Phys. Rev. Lett., 1992, 68(5), 631-634			
	76	Mintmire, J.W., et al., 'Carbon, 1995, 33(7), 8		nd structural p	roperties of carbon nanotubes,"
	77	nanotube FET," Science	e, <b>2003</b> , <i>300</i>	, 783-786	l emission from a carbon
	78	various surfactants," No	ano Lett., 20	<b>03</b> , <i>3(10)</i> , 1379	
	79	Nakashima, N., et al., "Water-soluble single-walled carbon nanotubes via noncovalent sidewall-functionalization with a pyrene-carrying ammonium ion," <i>Chem. Lett.</i> , <b>2002</b> , 638-639			
	80		led carbon na		"Small Tech Advantage, 2004,
EXAMINER					SIDERED

	Form PTO-1449 Modified			o. 34/	Application No. 10/526,941	
C	777 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 **	Applicant Arjun G. Yodh, et al.		
		nent of Commerce Frademark Office	Filing Dat Septembe		Group Not Yet Assigned	
			Confirmat 7528	ion No.		
O'	THEI	R DOCUMENTS (Includ	ing Author	, Title, Date, I	Pertinent Pages, Etc.)	
	81	Nikolaev, P., et al., "Gas-phase catalytic growth of single-walled carbon nanotubes from carbon monoxide," <i>Chem. Phys. Lett.</i> , <b>1999</b> , <i>313</i> , 91-97				
	82	(s-SWNTs)," J. Am. Che.	m. Soc., 20	<b>)1</b> , <i>123</i> , 733-73		
	83	O'Connell, M.J., et al., "Reversible water-solubilization of single-walled carbon nanotubes by polymer wrapping," <i>Chem. Phys. Lett.</i> , <b>2001</b> , <i>342</i> , 265-271				
	84	O'Connell, M.J., et al., "Band gap fluorescence from individual single-walled carbon nanotubes," <i>Science</i> , <b>2002</b> , <i>297</i> , 593-596			m individual single-walled carbon	
	85		Odom, T.W., et al., "Atomic structure and electronic properties of single-walled carbon nanotubes," <i>Nature</i> , <b>1998</b> , <i>391</i> , 62-64			
	86		al rigidity a	nd low frequen	ncy vibrational modes of long	
	87	under sonication," Chem.	. Phys. Lett.	, <b>2002</b> , <i>364</i> , 30		
	88	Pompeo, F., et al., "Water solubilization of single-walled carbon nanotubes by functionalization with glucosamine," <i>Nano Letters</i> , <b>2002</b> , <i>2</i> (4), 369-373				
	89	Qian, D., et al., "Load transfer and deformation mechanisms in carbon nanotube-polystyrene composites," <i>Appl. Phys. Lett.</i> , <b>2000</b> , <i>76(20)</i> , 2868-2870			6(20), 2868-2870	
	90	Radosavljević, M., et al., "High-field electrical transport and breakdown in bundles of single-wall carbon nanotubes," <i>Phys. Rev B., Rapid Communications</i> , <b>2001</b> , <i>64</i> , 241307-1 – 241307-4				
EXAMINER	XAMINER DATE CONSIDERED				SIDERED	

	O-1449 Modified	Docket No. UPNA-0034/ P2952	Application No. 10/526,941		
Cited	List of Patent and Publications Cited by Applicant (Use several sheets if necessary)		al.		
	tment of Commerce Trademark Office	Filing Date September 8, 200	Group Not Yet Assigned		
		Confirmation No. 7528			
ОТН	ER DOCUMENTS (Inclu	ding Author, Title,	Date, Pertinent Pages, Etc.)		
9			cular memory elements based on Nano Lett., 2002, 2(7), 761-764		
9:	2 Ravindran, S., et al., "C	Ravindran, S., et al., "Covalent coupling of quantum dots to multiwalled carbon nanotubes for electronic device applications," <i>Nano Letts.</i> , <b>2003</b> , <i>3(4)</i> , 447-453			
9.	Rao, S.G., et al., "Large 36-37	Rao, S.G., et al., "Large-scale assembly of carbon nanotubes," Nature, 2003, 425,			
9.	Ren, Z.F., et al., "Synth glass," <i>Science</i> , <b>1998</b> , <i>2</i>		of well-aligned carbon nanotubes on		
9:		ng luminescence of s	g luminescence of solubilized carbon nanotubes," J. Am.		
9		cal limiting properti	es of suspended and solublized carbon 071-7076		
9'		ing nanotubes: field	emissions from an atomic wire,"		
9	Rinzler, A.G., et al., "L	arge-scale purification	arge-scale purification of single-wall carbon nanotubes: aracterization," Appl. Phys. A, 1998, 67, 29-37		
99		onic structure of grap	ohene tubules based on C <sub>60</sub> ," Phys. Rev.		
10		l Properties of Carbo	on Nanotubes, 1 <sup>st</sup> Ed., <i>Imperial College</i> xii		
EXAMINER			CONSIDERED		

	Form PTO-1449 Modified			o. 34/	Application No. 10/526,941				
List of Patent and Publications Cited by Applicant (Use several sheets if necessary)			Applicant Arjun G. Yodh, et al.						
U.S. Department of Commerce Patent and Trademark Office			Filing Dat Septembe		Group Not Yet Assigned				
			Confirmat 7528	ion No.					
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)									
	101	Sandler, J., et al., "Development of a dispersion process for carbon nanotubes in an epoxy matrix and the resulting electrical properties," <i>Polymer</i> , <b>1999</b> , <i>40</i> , 5967-5971							
	102	Sano, M., et al., "Self-organization of PEO-graft-single-walled carbon nanotubes in solutions and langmuir-blodgett films," <i>Langmuir</i> , <b>2001</b> , <i>17(17)</i> , 5125-5128							
	103	Schadler, L.S., et al., "Load transfer in carbon nanotube epoxy composites," <i>Appl. Phys. Lett.</i> , <b>1998</b> , <i>73(26)</i> , 3842-3844							
	104	Shelimov, K.B., et al., "Purification of single-wall carbon nanotubes by ultrasonically assisted filtration," <i>Chem. Phys. Letts.</i> , <b>1998</b> , <i>282</i> , 429-434							
	105	Smith, B.W., et al., Encapsulated C <sub>60</sub> in carbon nanotubes," <i>Nature</i> , <b>1998</b> , <i>396</i> , 323-324							
	106	Smith, B.W., et al., "Structural anisotropy of magnetically aligned single wall carbon nanotube films," <i>Appl. Phys. Letts.</i> , <b>2000</b> , <i>77(5)</i> , 663-665							
	107	Star, A., et al., "Starched carbon nanotubes," Agnew. Chem. Int. Ed., 2002, 41, 2508-2512							
	108	Strano, M.S., et al., "Electronic structure control of single-walled carbon nanotube functionalization," <i>Science</i> , <b>2003</b> , <i>301</i> , 1519-1522							
	109	<b>1997</b> , <i>386</i> , 474-477	ns, et al., "Individual single-wall carbon nanotubes as quantum wires," Nature,						
	110	Thess, A., et al., "Crystalline ropes of metallic carbon nanotubes," <i>Science</i> , <b>1996</b> , 273, Issue 5274, 483-487 (Abstract, 2 pages)							
EXAMINER				DATE CONS	SIDERED				

	Form PTO-1449 Modified			Application No. 10/526,941					
Cited b	List of Patent and Publications Cited by Applicant (Use several sheets if necessary)			Applicant Arjun G. Yodh, et al.					
	nent of Commerce Frademark Office	Filing Dat Septembe		Group Not Yet Assigned					
		Confirmat 7528	ion No.						
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)									
111	van Blaaderen, A., "Ten 385(23), 321-324	n Blaaderen, A., "Template-directed colloidal crystallization," <i>Nature</i> , <b>1997</b> , 5(23), 321-324							
112	van der Kooij, F.M., "Liquid crystal phase transitions in suspension of polydisperse plate-like particles," <i>Nature</i> , <b>2000</b> , <i>406</i> , 868-871								
113	Vigolo, B., et al., "Macroscopic fibers and ribbons of oriented carbon nanotubes," <i>Science</i> , <b>2000</b> , 290, 1331-1334								
114	Wanless, E.J., et al., "Organization of sodium dodecyl sulfate at the graphite-solution interface," <i>J. Phys. Chem.</i> , <b>1996</b> , <i>100</i> , 3207-3214								
115	Wong, E.W., et al., "Nanobeam mechanics: elasticity, strength, and toughness of nanorods and nanotubes," <i>Science</i> , 1997, 277, 1971-1975								
116	Yakobson, B.I., et al., "Fullerene nanotubes: C1,000,000 and beyond," Am. Sci., 1997, 85, 324-337								
117	Yudasaka, M., et al., "Effect of an organic polymer in purification and cutting of single-wall carbon nanotubes," <i>Appl. Phys. A</i> , <b>2000</b> , 71, 449-451								
118	Zhao, B., et al., "Synthesis and properties of a water-soluble single-walled carbon nanotube-poly( <i>m</i> -aminobenzene sulfonic acid) graft copolymer," <i>Adv. Funct. Mater.</i> , <b>2004</b> , <i>14</i> (1), 71-76								
119	Zheng, M., et al., "Structure-based carbon nanotube sorting by sequence-dependent DNA assembly," <i>Science</i> , <b>2003</b> , <i>302</i> , 1545-1548								
120	· · · · · •	orbas, V., et al., "Preparation and characterization of individual peptide-wrapped ngle-walled carbon nanotubes," J. Am. Chem. Soc., 2004, 126, 7222-7227							
EXAMINER			DATE CONS						

Form PTO-1449 Modified  List of Patent and Publications  Cited by Applicant	-	Docket No. UPNA-0034/ P2952  Application No. 10/526,941  Applicant								
(Use several sheets if necessary	Arjun G. Yodh, et al.									
U.S. Department of Commerce Patent and Trademark Office	Filing Date September 8, 2005	Group Not Yet Assigned								
		Confirmation No. 7528								
U. S. PATENT DOCUMENTS										
Examiner Document Initial No.	Date	Name		Class	Subclass					
121 6,322,713 B1	11/27/01	Choi, et al.		216	38					
122 6,512,031 B1	01/28/03	Honda, et al.		524	115					
123 6,645,455 B2	11/11/03	Margrave, et al.		423	447.1					
124 6,749,712 B2	06/15/04	Kuper		156	296					
125   2001/0029983 A1	10/18/01	Unger, et al.		137	597					
126 2002/0085968 A1	07/04/02	Smalley, et al.		422	198					
127 2002/0090331 A1	07/11/02	Smalley, et al.		422	198					
128 2002/0113335 A1	08/22/02	Lobovsky, et al.		264	184					
129 2003/0026754 A1	02/06/03	Clarke, et al.		423	447.2					
130 2003/0170167 A1	09/11/03	Nikolaev, et al.		423	447.1					
131 2003/0180526 A1	09/25/03	Winey, et al.		428	323					
132 2004/0022718 A1	02/05/04	Stupp, et al.		423	445 R					
FORE	IGN PATE	ENT DOCUMENTS								
Examiner Initial Document No.	Date	Country	Trai YES		nslation					
133 WO 03/080513 A2	10/02/03	PCT		IES	NO					
134 WO 2004/001107 A2	12/21/03	PCT								
135 WO 2004/024428 A1	03/25/04	PCT								
EXAMINER	DATE CONSIDERED									